

DATA SHEET

GFH Protective Filter

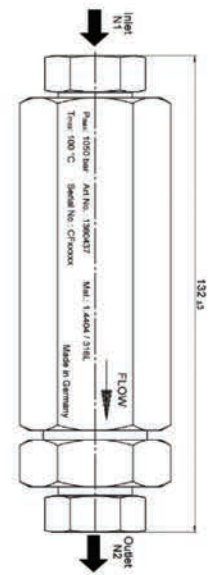
Features

The Schroeder GFH gas filter supplements our product range for ensuring technical cleanliness for hydrogen stations up to 1,050 bar. The GFH is a fitting filter for both onboard and stationary utilisation. It assures the functional protection of downstream system components, e.g. non-return or control valves, dispensers (fueling nozzles) and filling spouts on vehicles.

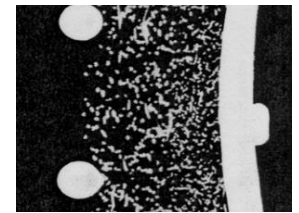
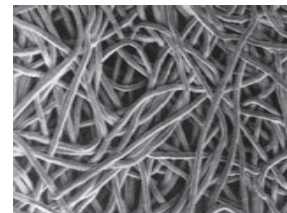
Installation takes place immediately in front of the component to be protected. As an option, the filter element, particularly with onboard solutions, can be integrated directly in the housing of the respective component and thus adapted optimally to the respective application.

Together with the GF1, the GFH complements our comprehensive filtration portfolio for the use in hydrogen applications. Whereas the GF1 represents a work filter in the classic sense, the GFH finds its main use in protective filtration. With the market introduction of the GF1, it was for the first time possible to separate contaminants process secured, which were carried in from the outside to the system of a hydrogen refueling station.

Nevertheless, impurities that are generated by downstream process technology equipment, e.g. the wear of components and materials of seals, can lead to the failure of important system components. This risk can now be significantly reduced by the use of the GFH as a protective filter.



Chemicon® Filter Material



Chemicon®

- No fibre migration possible

Graduated Filter Structure

- Maximum filter porosity
- Lowest pressure loss, due to high open filter surface
- Maximum dirt holding capacity

Performance Data

Medium:	Gas (H ₂ , N ₂ , u.w.)
Design Temperature:	- 196 °C / + 100 °C
Design Pressure PD:	1050 bar
Flow Rate:	up to max. 60 g/s for H ₂
Filtration Rating:	0.5 µm up to 20 µm
Material:	316 L

Product Advantages

- Best permeate quality due to Chemicon® material
- Defined separation rate
- High dirt holding capacity
- Excellent differential pressure stability
- Extremely robust filter element technology - no penetration of the filter material during refueling process
- High pressure stability - highest resistances through non-utilisation of adhesives, polymer seals or grouting
- Exclusively metallic sealed joints
- Optional integration of the GFH filter elements in the housing of the component to be protected*